

WHAT IS CLAIMED IS:

1. An implantable medical device, comprising:
 - a support structure formed such that magnetic field changes in a region immediately proximate the support structure, induced by a magnetic resonance imaging process, are substantially unobstructed by the support structure; and
 - a magnetic material coating at least part of the support structure.
2. The implantable medical device of claim 1 wherein the implantable medical device comprises a stent, the support structure forming a generally tubular structure that is substantially non-magnetic, and wherein the magnetic material coats the generally tubular structure such that at least part of the generally tubular structure is visible during a magnetic resonance imaging procedure.
3. The implantable medical device of claim 2 wherein the generally tubular structure is made of a metallic material.
4. The implantable medical device of claim 3 wherein the metallic material is at least one of

Nitinol, stainless steel, tantalum, niobium, titanium and copper.

5. The implantable medical device of claim 2 wherein the generally tubular structure is made of at least one of a polymer and a ceramic.

6. The implantable medical device of claim 2 wherein the generally tubular structure is made of a biodegradable material.

7. The implantable medical device of claim 1 wherein the magnetic material is paramagnetic.

8. The implantable medical device of claim 1 wherein the magnetic material is ferromagnetic.

9. The implantable medical device of claim 1 wherein the magnetic material includes at least one of iron, dysprosium, gadolinium, terbium, copper, cobalt, manganese, chromium and nickel.

10. The implantable medical device of claim 2 wherein the generally tubular structure includes an end portion and the magnetic material is applied to the end portion.

11. The implantable medical device of claim 2 wherein the generally tubular structure includes a

first end portion and a second end portion and the magnetic material is applied only to the first end portion and the second end portion. ;

12. A stent comprising:

a generally tubular structure made of a metallic material that is substantially non-magnetic; and

means for rendering the generally tubular structure visible during a magnetic resonance imaging procedure.

13. The stent of claim 12 wherein the metallic material is at least one of Nitinol, stainless steel, tantalum, niobium, titanium and copper.

14. The stent of claim 12 wherein the means for rendering is a paramagnetic material.

15. The stent of claim 12 wherein the means for rendering is a ferromagnetic material.

16. The stent of claim 12 wherein the means for rendering includes a material that is at least one of iron, dysprosium, gadolinium, terbium, copper, cobalt, manganese, chromium and nickel.

17. The stent of claim 12 wherein the generally tubular structure includes an end portion and the means for rendering is applied to the end portion.

18. The stent of claim 12 wherein the generally tubular structure includes a first end portion and a second end portion and the means for rendering is applied to the first end portion and the second end portion.

19. A method for making an implantable medical device, comprising:

forming a support structure such that magnetic field changes in a region immediately proximate the support structure, inducing by a magnetic resonance imaging process, are substantially unobstructed by the support structure; and

applying a magnetic material to at least part of the support structure such that the support structure is visible during a magnetic resonance imaging procedure.

20. The method of claim 19 wherein applying comprises using a plasma immersion ion implantation process.

21. The method of claim 20 wherein applying further comprises shielding a portion of the support

structure so that the magnetic material is applied to only an end portion of the support structure.

22. The method of claim 20 wherein applying further comprises shielding the support structure so that the magnetic material is only applied to a first end portion and a second end portion of the support structure.

23. The method of claim 19 wherein the support structure is made of a metallic material.

24. The method of claim 23 wherein the metallic material is at least one of Nitinol, stainless steel, tantalum, niobium, titanium and copper.

25. The method of claim 19 wherein the support structure is made of at least one of a polymer and a ceramic.

26. The method of claim 19 wherein the support structure is made of a biodegradable material.

27. The method of claim 19 wherein the magnetic material is paramagnetic.

28. The method of claim 19 wherein the magnetic material is ferromagnetic.

29. The method of claim 19 wherein the magnetic material includes at least one of iron, dysprosium, gadolinium, terbium, copper, cobalt, manganese, chromium and nickel.

30. An elongated medical instrument comprising:
a support structure including a segment of material helically oriented about an axis of the instrument wherein the material is at least one of a polymer and a ceramic; and
a magnetic material applied to the segment.

31. The instrument of claim 30 wherein the magnetic material is paramagnetic.

32. The instrument of claim 30 wherein the magnetic material is ferromagnetic.

33. The instrument of claim 30 wherein the magnetic material includes at least one of iron, dysprosium, gadolinium, terbium, copper, cobalt, manganese, chromium and nickel.